

Claims

1. A touch-sensitive device for scrolling a document on a display screen, said device comprising: a central scrolling area extending along a longitudinal axis and first and second end scrolling areas positioned along the longitudinal axis on opposed sides of the central scrolling area, said first and second end scrolling areas being physically separate and spaced from the main scrolling area.
2. The device of claim 1, wherein said device is part of a keyboard including an alphanumeric section, said scrolling area being disposed within said alphanumeric section.
3. The touch-sensitive device of claim 1, further comprising a housing with first, second and third opening that frames the central, first end, and second end scrolling areas.
4. The touch-sensitive device of claim 3, said housing further having members extending across scrolling regions to physically divide said central and first end scrolling areas, and said central and second end scrolling areas.
5. The touch-sensitive device of claim 1, further comprising first and second scroll input surfaces positioned immediately adjacent to said central scrolling area, and on opposing sides of and spaced from said central scrolling area in a direction perpendicular from said longitudinal axis, said first and second input surfaces enabling the scrolling of a document in opposite directions along a first axis.
6. The device of claim 5, further comprising a housing with first, second, third, fourth, and fifth openings that frames said central scrolling area, said first and second input surfaces, and said first end and second end scrolling areas, respectively.
7. The device of claim 6, wherein said central scrolling area has a length measured along the longitudinal axis and an average width perpendicular from the longitudinal axis, wherein said length is greater than two times the width.

8. The device of claim 6, wherein said central scrolling area has a length measured along the longitudinal axis and an average width perpendicular from the longitudinal axis, wherein said length is greater than three times the width.

9. The device of claim 6, wherein said first and second end scrolling areas enable the scrolling of a document in opposite directions along a second axis perpendicular to the first axis.

10. The touch-sensitive device of claim 1, wherein said first end and second end scrolling areas are generally circular in shape.

11. The touch-sensitive device of claim 1, wherein said first end and second end scrolling areas are generally hemispherical in shape.

12. The touch-sensitive device of claim 1, wherein said first end and second end scrolling areas are generally triangular in shape.

13. A touch-sensitive device for scrolling a document on a display screen, said device comprising: a central scrolling area extending along a longitudinal axis and having a width in a direction perpendicular to the longitudinal axis, and first and second end scrolling areas positioned along the longitudinal axis on opposed sides of the central scrolling area, said first and second end scrolling areas having a width that differs from the width of the central scrolling area.

14. The touch-sensitive device of claim 13, said first and second end scrolling areas having a width that is greater than the width of the central scrolling area.

15. The touch-sensitive device of claim 13, further comprising a housing with an opening that frames the central and first and second end scrolling areas.

16. The touch-sensitive device of claim 13, said first and second end scrolling areas have a width that is narrower than the width of the central scrolling area.

17. The touch-sensitive device of claim 16, wherein the first and second ends each have distal ends, said first and second end tapering in width as they approach their distal ends.

18. The touch-sensitive device of claim 17, further comprising a housing with an opening that frames the scrolling area.

19. The device of claim 13, wherein said device is part of a keyboard including an alphanumeric section, said scrolling area being disposed within said alphanumeric section.

20. The touch-sensitive device of claim 19, further comprising first and second scroll input surfaces positioned adjacent to said central scrolling area, and on opposing sides of and spaced from said central scrolling area in a direction perpendicular from said longitudinal axis, said first and second input surfaces enabling the scrolling of the image in opposite directions along a first axis.

21. A touch-sensitive device for scrolling a document on a display screen, said device comprising: a scrolling area extending along a longitudinal axis, and opposed first and second ends, said first and second ends being rounded.

22. The touch-sensitive device of claim 21, wherein said first and second ends each have an extreme end, said extreme ends being rounded.

23. The touch-sensitive device of claim 22, further comprising a housing with an opening that frames the scrolling area.

24. The touch-sensitive device of claim 21, wherein said device is part of a keyboard including an alphanumeric section, said scrolling area being disposed within said alphanumeric section.

25. The touch-sensitive device of claim 21, wherein said scrolling area is generally hourglass shaped.

26. The touch-sensitive device of claim 21, further comprising first and second scroll input surfaces positioned adjacent to said scrolling area, and on opposing sides of and spaced from said scrolling area in a direction perpendicular from said longitudinal axis, said first and second input surfaces enabling the scrolling of the image in opposite directions along a first axis.

27. A touch-sensitive device for scrolling a document on a display screen, said device comprising: a scrolling area extending along a longitudinal axis enabling the scrolling of a document in a first direction, and first and second scroll input surfaces positioned immediately adjacent to said scrolling area, and on opposing sides of and spaced from said scrolling area in a direction perpendicular from said longitudinal axis, said first and second input surfaces enabling the scrolling of a document in a direction perpendicular from the first direction.

28. The device of claim 27, further comprising a housing with first, second and third openings that frames the scrolling area, and the first and second input surfaces respectively.

29. The device of claim 27, wherein said housing is part of a keyboard.

30. The device of claim 29, wherein said keyboard includes an alphanumeric section and said scrolling area being disposed within said alphanumeric section.

31. A touch-sensitive device for scrolling a document on a display screen, said device comprising: a scrolling area extending along a longitudinal axis and having a width in a direction perpendicular to the longitudinal axis, and opposed first and second ends each having a distal end, and tactile feedback means located between the distal ends for providing tactile feedback for assisting in the location of the first and second ends.

32. The device of claim 31, wherein the tactile feedback means is located on an outer surface on the scrolling area.

33. The device of claim 32, wherein the tactile feedback means includes surface texture on the outer surface of the scrolling area.

34. The device of claim 33, wherein the tactile feedback means includes discrete surface texture changes on the scrolling area.

35. The device of claim 31, further comprising a housing with an opening that frames the scrolling area, and wherein the tactile feedback means includes changes in the surface of the frame in the region immediately adjacent the opening.

36. The device of claim 35, wherein the tactile feedback means includes raised projections of the surface of the frame in the region immediately adjacent the opening.

37. The device of claim 35, wherein the tactile feedback means includes recesses in the surface of the frame in the region immediately adjacent the opening.

38. The device of claim 31, wherein the tactile feedback means includes a change in width of the opening immediately adjacent the scrolling area.

39. The device of claim 31, wherein the tactile feedback means includes at least one member coupled to the housing and extending into a boundary of the scrolling area.

40. The device of claim 35, wherein the tactile feedback means includes a sawtooth contour in the surface of the frame in the region immediately adjacent the opening.

41. A keyboard, said keyboard comprising:

an alphanumeric section; and

an elongated touch-sensitive strip disposed within said alphanumeric section.

42. The keyboard of claim 41, wherein the alphanumeric section includes a G key and a B key, said elongated touch-sensitive strip being disposed between said G key and said B key.

43. The keyboard of claim 41, wherein the alphanumeric section includes a T key and a Y key, said elongated touch-sensitive strip being disposed between said T key and said Y key.

44. The keyboard of claim 41, wherein the alphanumeric section includes a space bar, said elongated touch-sensitive strip being disposed immediately behind said space bar.

45. The keyboard of claim 41, wherein the alphanumeric section includes a G key, a B key, a T key, a Y key, and a space bar, said elongated touch-sensitive strip being (a) disposed between said G key and said B key, (b) disposed between said T key and said Y key, and (c) disposed immediately behind said space bar.

46. The keyboard of claim 41, further comprising an editing section and a numeric section, said editing section and said numeric section being laterally disposed from said alphanumeric section.

47. The keyboard of claim 41, wherein the keyboard has a front-to-back direction extending from a front of the keyboard to a back of the keyboard, and a side-to-side direction extending from a left side of the keyboard to a right side of the keyboard, the front-to-back direction being perpendicular to the side-to-side direction, wherein said

elongated touch sensitive strip extends along a longitudinal axis that is angularly displaced from the front-to-back direction.

48. The keyboard of claim 47, wherein said longitudinal axis of said elongated touch sensitive strip is angularly displaced from the front-to-back direction by an angle in the range between 5 and 20 degrees.

49. The keyboard of claim 41, wherein the alphanumeric section is divided into first and second portions, said first and second portions each being generally angularly disposed relative the keyboard, said elongated touch sensitive strip extends along a longitudinal axis that is angularly disposed relative to the keyboard by an amount that is approximately the same and the angular disposition of the first portion.

50. A system for scrolling a document on a display screen, said system comprising:

 a first touch-sensitive device having an elongated touch sensitive input surface;

 a second touch-sensitive device having an elongated touch sensitive input surface, said second-touch sensitive device being spaced from and adjacent to said first touch-sensitive device; and

 a physical divider disposed between first and second touch-sensitive devices, said divider having a contoured edge immediately adjacent the elongated touch sensitive input surface of at least one of said first and second touch-sensitive devices.

51. A system of claim 50, wherein said contoured edge is sawtoothed shaped.

52. The system of claim 51, wherein said divider has a second edge opposite from said contoured edge, said second edge having a contour that differs from said sawtoothed shape.